ABSTRACT

A programmable processor and method for improving the performance of processors by incorporating an execution unit operable to decode and execute single instructions specifying

5   both a mask and a register containing data, the mask comprising fields that each correspond to a field of the data contained in the register, the execution unit is operable to detect some of the fields of the mask as having a predetermined value and identifying corresponding fields of the data contained in the register as write-enabled data fields; and cause the write-enabled data fields to be written to a specified memory location.

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